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RTTY JOURNAL

©

AMATEUR RADIOTELETYPE - COMPUTERS - PACKET

VOLUME 36 NUMBER 10

DECEMBER 1988

RECEIVED
DEC 21 1988

RTTY JOURNAL
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OWNER - EDITOR - PUBLISHER

ALL CORRESPONDENCE TO:
9085 La Casita Ave.,Fountain Valley, Ca. 92708
TELE: (714) 847-5058

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POSTMASTER: The RTTY JOURNAL (**USPS 391850**) is published monthly except May/Jun and Jul/Aug issues which are combined for $10.00 per year by RTTY JOURNAL, 9085 La Casita Ave., Fountain Valley, Ca. 92708. Second Class postage paid at Santa Ana, Ca. 92799 - 9998 and additional mailing offices.

ADDRESS CHANGES: Send address changes to RTTY JOURNAL, 9085 La Casita Ave., Fountain Valley, Ca. 92708
ISSN 0033 - 7161

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92708

HITS & MISSES

I don't know about you, but December for me is always a time to reflect on how the year went. And in particular, how the Journal is doing. What I see, at times makes me happy and at other times makes me sad. I see, new subscribers coming on board every day and they are most welcome to the digital ranks. I also see some subscribers leaving us for various reasons. The end result has not helped the Journal to prosper much this year but we'll keep trying. On the flip side I see more interesting articles have appeared this last year than the year before. One new writer (Eddie, W6/G0AZT) has joined the staff and is doing a bang up job on AMTOR. The second annual CQ/RTTY Journal RTTY contest was again a huge success which we can all be proud of. And speaking of contests, how about the new RTTY Roundup Contest coming up in January which is sponsored by the ARRL. This is a first for them and we hope all will turn out in support of this new endeavor.

The end of the year also signifies to me, a time to be thankful for all the good things and good times of the past year. To start with, I wish to thank all the RTTY Journal staff writers who have done an outstanding job this year in bringing the latest digital news to all of us each month. I'm sure they will continue to strive in this same direction this coming year. I'm thankful to our advertisers who help make the Journal possible each month. Without their support each month, your subscription rates would probably be double what they are now. Please keep this in mind the next time you are in the market for new equipment and give our advertisers first shot. I hope you won't forget to mention your appreciation for their support of the RTTY Journal. I know most of time when we buy something new, we have other thoughts on our minds such as features, quality, etc. of a product and forget to mention we heard about this product in one of the publications. But it is important to mention our names to the advertiser, in fact, they are very much interested in knowing if their advertising dollars are being well spent.

Of course it goes without saying, the RTTY Journal would not be in your home if it were not for your faithful support. Recently, I started a campaign to increase our numbers by inserting a subscription card in all the domestic copies that go out. I'm happy to report that you the readers have been helping by giving these cards to friends whom you feel would enjoy reading the Journal. The increases have been small so far but they are coming in and I am most thankful for your help. In fact, I'm so encouraged, that I intend to continue this card for a while longer. Our ranks will never approach those of the major magazines nor do I have any designs in this area. My only wish is that we stay afloat in the muddy waters of the publishing business.

On the good times side, I had a super time at Dayton this past year. I met many digital Hams who subscribe to the Journal or who I have corresponded with in the past. It was great to meet them and enjoy an eyeball QSO.

(cont. pg. 14)

Dick Uhrmacher
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57702

MSO'S

A Very Merry Christmas and a Happy, Healthy New Year to you all! My goodness how time flies when you're having fun. Can it really be almost Christmas again? Got your "wish list" all filled out with that new transceiver you've been wanting? I'm sure that we all have many things to be thankful for during this past year, and me especially! During my surgery and recovery period earlier this year, I was most certainly blessed with the finest friends a person could ever ask for. It's during stressful times like that when you discover the real meaning of friends, and even though the names are too many to mention here, I want to extend during this Holiday Season my heartfelt thanks to each and every one of you!

OVER THE HORIZON RADAR

Although this article is a little off the subject of RTTY Mailboxes, I feel that it is a subject that will affect all phases of Amateur Radio, and as such we all should be interested in the development concerning the United States installation of the Over the horizon, Back Scatter, Radar System. I'm confident that we all have spoken unprintable words about the Russian "woodpecker", (their version of a pulse type over-the-horizon system), and now we're told that we'll soon have one in our own backyard. This is progress?

This $600 million dollar radar system consists of four major sites, located on the east coast, west coast, Alaska, and one in my backyard, in Northeastern South Dakota. All of these systems look outward from the United States, with the exception of the one in South Dakota, which will be focused inward (south), to detect various missile types approaching from the South. This centrally located transmitter/receiver site will cover from Maine to Florida, across the southern States to California, and up the coast to Washington. Instead of the familiar "woodpecker" sound, the U.S. radar system will be of the CW type, and will have a distinctive "chirping" sound.

But you ask, "What does having this system operational have to do with Amateur Radio"?? When the United States Air Force was asked "Will this radar system cause interference to the Amateur Radio Service", they said: "Although the Air Force does not intend to operate the OTH-B radar system in the Amateur bands, they (the amateur bands) are adjacent to bands in which the radar can be expected to operate. Thus, enough of the radar's energy could possibly fall into an Amateur band to produce interference to the users there. Due to sky wave propagation, specifically predicting when or where any interference would occur is impossible". Now that sounds to me like your neighbor spraying weed killer on a windy day, and hoping that it doesn't drift over into your rose garden!

The OTH-B radar system is designed to operate between 5.9 and 28.0 MHz, and the signals from this system will be very strong on both coasts of the United States. Defense of the United States is quite naturally a very important thing, and since I served almost 22 years in the United States Air Force defending our Nation, I'm a bit sheepish about speaking out too loudly about advances in radar technology. However, at the same time, I wonder if the OTH-B end-system operational features aren't well known, and the experimentation and qualification of this system won't be done "on the air", without any previous knowledge of what to expect. The Russian Woodpecker has been disrupting HF communications for years, and if recent press information is correct, they are not much closer to an operational system than when they started.

I'm not sure just what you and I can do to prevent unwarranted interference to our Amateur bands from the OTH-B system. But I do know that we should be aware of the coming of this high technology radar system, and be prepared to carefully and methodically document interference if it should occur. Of course there are many other commercial services that share the HF spectrum with Amateur Radio, and I'm sure that interruption to commercial services will not be taken lightly. Stay tuned for Round Two!

FCC SUPPORTS DIGITAL COMMUNICATIONS ON 17 METERS

Russ Tower, K1DOW/4 points out that the FCC has proposed to open up the 17-Meter band on July 1, 1989.

(cont. pg. 6)

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AMTOR

Hello once again fellow "chirpers", I hope that you all had a very good Thanksgiving and like me, will be eating turkey left-overs, until Christmas!

Wow!, I never thought I would find the time to write an AMTOR article for this month's issue. Logs for the CQWW/RTTY Journal contest had to be checked and submitted, QSL cards for my VP5 trip answered, an article on my experiences at Providencies submitted before the deadline and I still had time to chase RTTY DX and work 32 new countries on 10 meters RTTY/SSB.

This months article will no doubt stir up a bit of a hornet's nest amongst those of you who use amplifiers in ARQ and those who send out persistent FEC beacons.

Let's take the amplifier situation first.
If you have been reading my regular epistles, you probably will have noted that I am not too keen on the use of high power in the ARQ mode. Let me say, thankfully, that I do not stand alone on this matter and I will try to explain some of the reasons.

It's not a "sour-grapes" situation because I do not own an amplifier or cannot afford the power company's bills. In the .U.K., from March, 1985 to June, 1987, not the best of band conditions, I was able to work seventy eight countries in ARQ, with a G5RV dipole and 80 watts. Neither is the above, an exercise in blowing "one's own trumpet", just an indication that QRO is not a requirement for successful "links".

AMTOR ARQ is basically a low power mode, due the method of "hand-shaking" between the two computers via the TNCs, which virtually "guarantees" error free traffic. It has been proven, many times, that with very low power and only "fair" band conditions, traffic will still flow, maybe at a slightly reduced rate, but that allows you to type ahead and fill your Qso buffer, if like me, you cannot type at the speed of light. (100 baud).

The next time you are tuning around the AMTOR portion of 20 meters, looking for an available slot, just take time off to listen to some of the other signals around. It will not be too difficult to find the station using an Amp. His signal will, naturally, be very strong. No harm in that, you say. Correct, but just try tuning off his tx/rx frequency and you may get a real big surprise. Yes, you can hear him "clicking" away, with equal strength, maybe one, two, three, or even more, KHz up or down or in extreme cases, both up and down. You may ask yourself, how much of the available frequency space does this fellow need, what ever happened to "key-click" filters, the rule about minimum power to maintain a contact and general courtesy to fellow users? I was always led to believe that the plastic keyboard modes were supposed to be narrow banded (?), unlike SSB,FM and AM.

I received a letter, concerning the use of amplifiers in ARQ, from KA1AE, Wilson, and I will retell most of it, verbatim. Wilson admits to using an amplifier in ARQ, but ONLY when necessary to maintain the link. Being a considerate gentleman, Wilson did a few experiments with a G-stn, asking him to check for "sprogs" either side of their tx/rx frequency. The results were very interesting and they should give food for thought to other QRO users.

Comments within brackets, are mine!
1. Transceiver, 50 watts out, no processor. (Top of the class!).

2. Transceiver driving Yaesu FL-7000, (BIG bux!) linear, 200 watts out, no processor. (Drop a grade or two).

3. Transceiver driving the linear, 200 watts out, processor ON. (Stand in the corner and recite one hundred times, "I must NEVER use the processor in FEC, ARQ or Baudot").

In the first two cases, the signals were fine, no buckshot or clicking plus/minus ten KHz, BUT with the naughty processor on, and I quote, "I was really a mess, taking up about 8 KHz of the band with buckshot and clicking. It is no use just setting up the rig/amplifier/processor per book, just listening to some of the audio on SSB will prove that!"

If you MUST use a linear in ARQ, have YOU checked with your "partner" to see if you are doing the same as Wilson discovered he was doing? Do you really care about other users?

(cont. next pg.)

(AMTOR cont. from pg. 4)

Think about it folks, us Amtorites have a little enough of each band to play in, so why take up nearly half the AMTOR sub-band and QRM your fellow Hams, just to prove that you have full QSK in your amplifier.

PLEASE get your "partner" to move off frequency and check for splatter, clicks etc. if the results are not in your favor, try turning the amp off and NEVER use the processor. You may be pleasantly surprised to find that the link is still possible, your power company bills will decrease and more important, you have shown some concern and respect to other users.

Now onto the subject of FEC "beacons". The following comments are generalizations and are not aimed at any particular station.

There are two classes of FEC beacons. Firstly, there's the one that "pops" up on a random frequency, not bothering to check if it is in use, and then proceeds to tell the world, that the SYSOP is not at home but that you can leave a message, if you wish.

Secondly, we have some of the message handling MBX operators doing the same thing, only this time they tell all and sundry that there is "mail" for Uncle Tom Cobbly and all. to a certain degree, I can see some use for this type of beacon, but come on guys, every five to ten minutes and with total disregard for anyone who may be using "your" frequency at the time.

Really, there is very little, if any, reason for the traffic handling MBXs to have a beacon at all. The majority of regular systems throughout the world, are listed by call, Selcall, frequency etc. , in many of the Baudot and AMTOR BBS;s. There is also a list in the September, 1988 issue of this Journal.

Newcomers to AMTOR need only listen around the bands and copy some of the traffic, to find out where these MBX's lurk, or better still, take out a subscription for the RTTY JOURNAL. (Plug of the month for you Dale).

In my humble opinion, the traffic handling MBXs should be silent, until "Called-up" by someone who wants to use their invaluable services, on the same lines as the National Auto- start Baudot system. That way there is less chance of being "zapped" by one MBX beacon in FEC, while you are trying to extract information from another, in ARQ. I cannot recall how many times that situation has happened to me, but I "wised up" in the end and timed the offending FEC beacon and accessed the one I wanted, during the other's silent periods.

Some of the traffic handling systems cover more than one band and change from 20 meters to 80 meters at "sked" times. When they come on to the "new" band, they send out a SHORT beacon call, just to advise interested parties, that they are now listening on the "new" band. No harm in that and very useful if the SYSOP overslept and forgot to do the "change-over" at the sked time.

If you MUST use an FEC beacon, please set the timer for, "on the hour" and every half hour, thereafter. That way, other stations will get the message and they will probably steer clear of your beacon frequency and avoid the QRM. If your software cannot detect that the frequency is in use at "due" time, then maybe you ought to have a chat with ZS6CDJ whose Baudot system will NOT start up if there is other traffic on or near his frequency. How about it, all you software writers out there?

MAILBOX

A "chirp" of thanks goes to KA1AE, Wilson for helping me to get my brain out of neutral and coming up with a subject for me to scribe about for this issue. I will re-direct all letter bombs that I may get as a result of this article, to his CBA.

Another deserved "chirp" to Russ, K1DOW/4, for sending me some additions to the MBX list, published in the September issue. Thank you for your input sir.

Would any kind person who does send me corrections/deletions/additions etc., please include times in UTC and whether the frequencies, are LSB and AFSK, because that is the method that I use on my Kenwood TS440S.

The following, are amendments and additions to the MBX list, for those of you who like to keep up to date.

K4CZ -- 3.648.5 (FSK) (KKCZ) Log-on: KC4Z de ur call.

K4CZ -- 7.047.5, 10.140 (FSK?) (CZZW) 24hrs Log-on CZZW cr/lf

(cont. pg. 6)

(MSO's cont. from pg. 3)
And the nice thing about it is they are recommending that the bottom 42 kHz (18.068 to 18.110) be reserved for digital communications, (CW,RTTY, etc). For further information on this subject, please refer to Page 53, November 1988 issue of QST. Thanks Russ.

K2BSM SAYS "THANKS"

The RTTY Journal received a very nice letter from Al Kruhm, K2BSM, which follows: "Dear OM. I would like to publicly and personally thank the following MSO operators for their undying patience in assisting me in putting together and successfully putting on the air MSOBSM: Clark Constant, W9CD, Gaylord Crawley, WB8ICL, and Frank Bascomb, K4KOZ. These gentlemen have gone far beyond a simple assist with their step by step instructions and further information on how these things work, the equipment needed for successful operation and a multitude of other problems encountered by a new operator. The TS-940S is a complex transceiver, and as Clark says, "the translation of the manual from Japanese to English leaves something to be desired", and the HAL ST-6000 is a piece of RTTY equipment that every RTTY operator should try to obtain. And so, thanks fellers, for making my life a little easier and a lot fuller."

MSO RAMBINGS

Planning on attending the 1989 Dayton HAMVENTION? Believe it or not, it's not too early to be thinking of motel/hotel reservations. As usual, the RTTY crowd will be gathering at the "Radisson Inn Dayton", and we hope to see you there. The K0VKH MSO will contain more information about the HAMVENTION and the RTTY Dinner as time goes along.

.... Brownie, K5FL and his XYL Joy, completed a wonderful European vacation just recently, and Brownie's MSO is active once again. He has a very well written recap of his journey through Europe, which can be found in his MSO on the National Autostart Frequency.

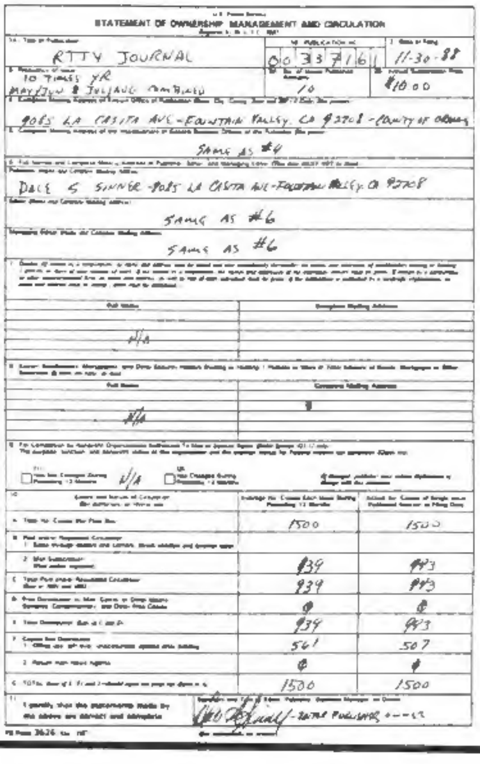
... The thunderboomer season in Guatemala has once again passed, and the TG9VT MSO is back on the National Autostart Frequency on a full time basis. Check John's MSO for the very latest in RTTY DX info.

... Bob, K1UOL, reports that Bob, WA7QWG, Indianapolis, In, is busy running an "APLINK" (AMTOR to Packet) station on 14.0735 MHz, or thereabouts. Bob has the 2-Meter Packet portion lined to the AMTOR files, and has been very enthusiastic about the results.

That's it for this month Gang! Merry Christmas, and I hope that 1989 is a happy, healthy and prosperous New Year for each of you. See you on the MSO's 73 **de Dick, K0VKH**

(AMTOR cont. from pg. 5)
VK2AGE now uses the very neat APLINK software, which is system controlled rather than user controlled, therefore you do not use the +? for change over, a cr/lf after each command YOU send, and the system takes control. As soon as you link with any MBX using this software, you have to type: LOGIN de ur call cr/lf, after you have "called" it up control. As soon as you link with any MBX using this software, you have to type: LOGIN de ur call cr/lf, after you have "called" it up by using the normal Selcall. If you are a first time user, just type: help cr/lf, and follow the prompts. The general commands consist of either, one or two letters, no more "Input for..., Output for ..". This speeds up the response time both ways and keeps you on your guard.

That about does it for this month. I would like to wish all our readers, A Merry Christmas and a Very Happy , Healthy and Prosperous 1989.
73 de Eddie. W6/GOAZT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A	1500	1500
B 1		
B 2	939	943
C	939	943
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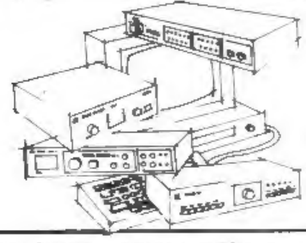

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RTTY JOURNAL 1988 AWARDS UPDATE

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1. W1MX
2. K6KW

W.A.C. 20 Meter

1. K3SWZ
2. W5RYA
3. W0MT
4. DJ8BT
5. SL5AR
6. DK4ZF
7. JH1TFF
8. SWL 13-13-018
9. DJ1QT
10. W4LH
11. VP2MRW
12. K4YZV
13. F6ALL
14. W7JWI
15. SM6AEN
16. W1MX
17. W9OEQ
18. K6KW
19. G3ZWW
20. DL8VX
21. W3EKT
22. W0JCO
23. PY2CYK
24. WB9LUK
25. WA6WGL
26. WB4TPU
27. K4GJW
28. DL8QP
29. I8YRK
30. G3YDR
31. I1PYS
32. LA2IJ
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38. W1GKJ
39. VE2QO
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41. OH1NI
42. WA0YDJ/4
43. K4VDM
44. G4ALE
45. GW3IGG
46. K4JAF/WA9AKT
47. W6JOX
48. JA4ONZ
49. G3IIR
50. SWL-BRS-18456
51. N3AI
52. I5HZZ
53. I5GZS
54. I2OLW
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56. SM5EIT
57. WA8CZS
58. WA9BOW
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62. K5GH/W5KHP
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64. WB6CYA/KG6CM
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66. WB2VDT
67. WA6CQW
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123. G4JLU
124. G0AZT
125. PY6ACP
126. AB0Y/4
127. KA7IVA
128. VK3EBP

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17. LZ2KRR
18. K4VDM
19. K1LPS

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32. LZ2KIM
33. G0ATX
34. VK2BQS
35. KE7PN
36. W2FG
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38. KE7PL
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40. JA1DSI (YL)
41. CR6AUR
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43. ONL5923
44. G6LAU
45. G0ARF
46. OH2BYS
47. NT0V

RTTY JOURNAL 1988 AWARDS UPDATE

DXCC AWARDS

1.	ON4BX	200	7801
2.	W3KV	210	7802
3.	I5KG	120	7803
4.	ON4CK	150	7804
5.	W5QCH	130	7804
6.	W8CQ	120	7804
7.	WA31KK	150	7804
8.	DK3CU	100	7804
9.	W5EUN	120	7804
10.	G6JF	140	7804
11.	W2LFL	200	7805
12.	I5ROL	100	7805
13.	W4YG	100	7805
14.	W3DJZ	150	7805
15.	JA1ACB	100	7805
16.	K8YEY/W8US	100	7805
17.	I5WT	226	7805
18.	W1GKJ	150	7805
19.	W4CQI	110	7805
20.	DL8VX	100	7805
21.	K6WZ	147	7806
22.	W3EKT	100	7806
23.	W8JIN	150	7806
24.	W4EGY	100	7806
25.	I8AA	225	7806
26.	K3SWZ	100	7806
27.	OK1MP	100	7806
28.	W5VJP	100	7806
29.	K4YZV	100	7806
30.	K7BV	210	7809
31.	F6ALL	100	7809
32.	F5JA	160	7810
33.	HB9AVK	100	7811
34.	F8XT	100	790401
35.	OH2HW	100	790410
36.	W9RY	100	790416
37.	DJ8BT	100	790524
38.	DF2KU	100	790716
39.	DL8KS	100	790829
40.	JA8ADQ	100	790915
41.	W3FV	150	790901
42.	VE2QO	100	791114
43.	W7MI	100	791201
44.	DJ3OE	100	800210
45.	I5FLN	220	800214
46.	W6JOX	164	800724
47.	JA1DSI	200	800923
48.	VK2SG	100	801103
49.	W2IUC	100	801103
50.	K0BJ	120	801110
51.	DJ1IJ	100	801215
52.	JA1BK	100	801215
53.	W2PSU	100	810221
54.	SM6AEN	100	810225
55.	I0AOF	100	810602
56.	SM7CLZ	100	810602
57.	DK5WJ	100	810602
58.	ON4WG	105	810605
59.	JA6GIJ	100	810921
60.	JA1JDD	100	811012
61.	WA6WGL	100	811102
62.	GI4AHP	100	811110
63.	SM7CLZ	100	811215
64.	KG6CM	100	811217
65.	JA1MIN	100	811219
66.	YB2BLI	100	810426
67.	W0HAH	100	820506
68.	K4VDM	100	820517
69.	DK1BX	120	820702
70.	K1NVY/7	100	820815
71.	JA1ZF	100	820825
72.	GM32XL	100	820925
73.	W0LHS	100	821027
74.	W8JMG	100	821122
75.	JR2TZL	100	821122
76.	JA3EOP	100	821221
77.	KB9IS	100	830105
78.	K4JAF	100	830401
79.	WB3HAZ	100	830501
80.	K1LPS	100	830520
81.	JR6AG	130	830615
82.	JA2VFW	100	830701
83.	DK4KK	100	830910
84.	N1BNK	100	830910
85.	XE1M	100	830926
86.	JA1DXV	100	830927
87.	JH1BIH	100	830928
88.	JR2CFD	100	831025
89.	N4FJL	100	831102
90.	SM5EIT	100	831104
91.	KY4I	100	831106
92.	TO 98. Not Issued		
99.	VE7VP	100	840102
100.	KA7BDB	100	840131
101.	JH2PDS	100	840404
102.	K4AGC	100	840520
103.	WB2VTD	100	840601
104.	HB9HK	100	840915
105.	N6ELP	100	850211
106.	WB4UBD	100	850501
107.	JA5TX	100	850515
108.	JA1BYL	100	850601
109.	JE1DTV	100	861128
110.	JA1QWF	100	861229
111.	I2WEG	109	870714
112.	VK2BQS	102	870818
113.	G4SKA	108	870911
114.	JA2NNF	113	870928
115.	KE7PN	105	871010
116.	G0ATX	102	871127
117.	DL8QP	100	880606
118.	JA3BN	128	880613
119.	JA1BWA	108	881018

DXCC to SWL

1.	G8CDW, Ted Double	821108
2.	Chris Gibbs	831106
3.	JA1-3477 Hajime	841231
4.	F11ADB	870427

WORKED ALL ZONES

ALL BAND

1.	TG9VT	870929
2.	JE1DTV	871130
3.	GM3ZXL	880801

20 METERS

1.	JR2CFD	870914
2.	JA1DSI	871130

COMPLETE RESULTS OF 1988 ANARTS RTTY CONTEST

SINGLE OPERATOR

	Station	points X	cntry X	cont +	VK/pts	Total
1.	VK5RY	13163	106	6		8,371,668
2.	IK5CKL	8275	129	6	2400	6,407,250
3.	VK2KM	9618	95	6		5,482,260
4.	WB5HBR	5428	122	6	3500	3,976,796
5.	RV9FQ	5579	116	6	700	3,883,684
6.	VK2SG	7972	81	6		3,874,392
7.	DJ6JC	5728	94	6	1900	3,232,492
8.	OK2FD	6193	83	6	2100	3,086,214
9.	N6GG	4259	110	6	2800	2,813,740
10.	PA3DBS	4200	86	6	800	2,168,000
11.	ZL2AKI	4715	74	6	6100	2,143,960
12.	7J6CAS	4484	71	6	5900	1,911,084
13.	K6WZ/0	3024	95	6	1100	1,724,780
14.	G0ARF	3390	84	6	700	1,709,260
15.	CE2CQZ	8568	45	4	100	1,542,340
16.	DJ3IW	3198	74	6	1000	1,420,912
17.	TG9VT	3070	74	6	3400	1,366,480
18.	AB0Y/4	3124	87	5	1200	1,360,140
19.	G0ATX	2920	76	6	1400	1,332,920
20.	JA1BWA	2909	72	5	1000	1,048,240
21.	VS6UP	2643	61	6	900	968,238
22.	W7MI	2398	76	5	1900	913,140
23.	HP1AC	2663	66	5	900	879,690
24.	VK2BQS	3884	55	4		854,480
25.	VE3UR	2381	56	6	900	800,916
26.	G0AZT/W6	2184	64	5	1700	700,580
27.	SP3BGD	1963	63	4	400	495,076
28.	W6ZH	1420	61	5	2100	435,200
29.	WA3ZKZ	1566	55	5	1100	431,750
30.	W6MTJ	1642	42	6	1300	415,084
31.	VE6ZX	1319	57	5	1100	377,015
32.	VK2EG	1719	39	5		335,205
33.	VE7DTA	1263	52	5	1000	329,380
34.	KI4MI	1322	49	5	400	324,290
35.	VK3EBP	1965	33	5		324,225
36.	ZL2BRQ	2589	28	4	1900	291,868
37.	VU2SJV	1170	38	6	500	267,260
38.	W2JGR	1308	37	5	1100	243,080
39.	GW3EHN	1307	33	5	500	216,155
40.	G4MKO	927	46	5		213,210
41.	JA2NNF	1055	32	5	1700	170,500
42.	SM5FUG	1158	29	5	100	168,010
43.	YO5BLA	591	32	5	100	94,660
44.	VE7VP	848	25	4	1600	86,400
45.	JE1DTV	711	21	5	400	75,055
46.	VE2LFL	588	25	5	600	74,100
47.	SM7BGE	430	25	6	200	64,700
48.	SM3MID	401	30	5	100	60,254
49.	VK2DAY	683	15	4		40,980
50.	WA4SSB	560	13	4	300	29,420
51.	YV5IZE	483	12	4		23,189
52.	KD2XN	442	17	3		22,542
53.	W9CD	465	10	4	700	19,300
54.	UR2FU	231	16	5	100	18,580
55.	9M2MW	376	12	4		18,048
56.	UA7TN	258	22	3		17,028
57.	VK2AJT	430	10	3		12,900
58.	SM6APB	200	10	4		8,000
59.	VU2IJ	223	10	3		6,690
60.	SP9AUV	173	6	4		4,252
61.	W7KPL	382	3	2	100	3,192

MULTIPLE OPERATOR

	Station	points X	cntry X	cont +	VK/pts	Total
1.	VU2JX	10071	140	6	1800	8,461,440
2.	LZ2KIM	9619	121	6	3600	6,986,994
3.	WA7EGA	6954	162	6	5900	6,765,188
4.	VI88NSW	11480	97	5		5,567,800
5.	DL0GK	7007	103	6	1800	4,332,126
6.	G4SKA	3803	92	6	500	2,099,756
7.	VK2TTY	2061	36	4		296,784
8.	SP3XR	498	25	5	100	62,350

SWL SECTION

	Station	points X	cntry X	cont +	VK/pts	Total
1.	G1DPL	3301	80	6	400	1,584,880
2.	ONL383	2971	88	6	1000	1,569,688

A message from Bill Storer, VK2EG (contest manager): On behalf of ANARTS I would like to thank all those who took part in the contest and submitted logs. Over 300 stations took part but as usual the percetage of logs sent in was small. All those who sent in logs will receive our Bi-centennary certificate for participation.

Cole Ellsworth, W6OXP
10461 Dewey Dr.
Garden Grove, CA.
92640

CONNECTIONS

Hello and a Happy Holiday Season to all! This will be short as the Journal Index, etc., are going require quite a lot of space.

WE HAVE MAIL

Old friend and former neighbor/colleague K5FL, Brownie, writes that he sent an inquiry to the Flesher Co. address given in this column in the October 1988 issue of the RTTY Journal and the letter was returned as "Unable to deliver, No forwarding address". Has anyone had any recent contact with the Flesher Co. or any of the people who use to work there? If anyone has an address or phone number that is different from the one published in the October issue, please let me know.

Brownie is looking for a manual for a Phillips model PM-3200 which is a 10 Mhz solid state scope. Something seems to be bad in the vertical amplifiers. A schematic would be especially helpful. If you can help, write him at 425 Magnolia, Denton, TX 76201

MORE MAIL

Received a message from K4YZU, Louisville, KY to the effect that he tried setting up the COM3 port as described in this Column last month but was unable to get the Norton Utilities to report the existence of the COM3 port (using the SI command). Has anyone else tried using the Norton SI command to check for the existence of the port after setting up the COM3 and COM4 ports as described last month? If so, I would like to know what you found. I am going to try it here also and see what happens. (Ten minutes later) OK, I just tried it here and find that the Norton SI (System Information) program looks at the "Equipment Installed" byte at location 0:411 to determine how many COM ports are available. When I set the byte at 411 Hex to 88, it (Norton SI) reports four COM ports. If I set it to 80, it reports no COM ports installed. If I set it to 86, it reports 3 COM ports. Therefore, it seems the SI command looks only at the Equipment Installed byte when it is checking the system. It may be that the SI program is more sophisticated than it appears at first glance. It may be that SI first looks at the byte at 0:411 and if it is set for one or more COM ports, perhaps it then goes and actually checks for a Async adapter at the designated port address before it decides a port actually exists. Now if the address written to bytes 404-405 and 406-407 do not match the actual hardwired address on the Async adapter card, then SI might not report that card as a valid COM port. It would require removing the Async card or changing the address on my computer to check this. (not tonight, it's getting too late). I do have all four COM ports in two Async cards installed in this AT.

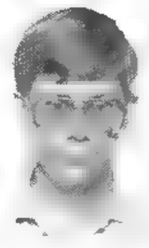
REQUEST FOR HELP

Dewey M. Bassett, 5201 Sugar Maple Dr, Dayton OH 45440 would like to get some info on connecting his APPLE IIC computer to an MFJ-1224 RTTY/CW interface. He needs a terminal program for the IIC and connection information. If anyone has a similar APPLE IIC system set up for RTTY/CW please let Dewey or me know what you did to get it going. Meanwhile I will try to dig up something locally

IBM-PC SERIAL PORTS (Continued from the November issue)

In this third installment we will discuss two different methods used by the computer to detect when incoming data is received at the serial I/O port. One method (used by the BIOS) is called "Polling", where every few milliseconds the computer checks the status of the serial port to see if it has any incoming data available. If there is no data, the computer goes back to whatever it was doing until the next time it is scheduled to check or "poll" the port. If there is data available, the data is placed in a buffer until the computer is ready to deal with it. If you run this port at 9600 baud, then the computer must poll this port every millisecond to avoid losing characters as it is receiving data at a rate of 960 characters per second. Even if there is no data, the polling still occurs every millisecond. This can be a very big time waster if no data is coming in, and when data does come in, there is little or no time for the computer to do anything else because it has to update the CRT display, etc. So it is easy to see why you can loose characters when you run the computer at

(cont. pg. 14)



Richard Polivka, N6NKO
7052 S. Friends Ave. Apt J
Whittier, Ca. 90602

PACKET

OLD IRONSIDES

I am sure that there are some of you out there who know of "Old Ironsides". It was the nickname of a wooden warship by the name of U.S.S. Constitution. I personally do not know how the name was coined but nevertheless, it stuck. Well, in order for the ship to stay at one place, it used a device called an anchor. The item is thrown overboard and lies at the bottom of the water to help hold the ship in one position. Now, there are things that people do not want any more because they either do not work or they are just plain too big and quite heavy. These items are usually called "Boat Anchors" by some because they think the only good use for the time is just that, as a boat anchor. well, I am in the final stages of reviving a "Boat Anchor" (can't feed baby and type at the same time) here. It is an old S-100 bus computer that I picked up for a song. I have been working on this machine with a good friend of mine, Mike, WA6ILQ, for a long time trying to get the unit up and running and I have finally succeeded at it giving me a meaningful screen of information. The computer uses a Z-80 (!) in it and runs on CP/M (!!). It may not be as fancy as a 286-based MS/DOS machine but it will be good to have. That way, I can send the articles to Dale over the telephone and spare him his fingers which key punch my articles into his machine each month.

The computer runs at 4MHz and will have 8" floppy drives. I will hook up the PK-232 to it for use with a communications program and the printer will also get hooked up there, too. I really can't wait to configure the BIOS for it. Funny thought, the machine can keep up with the terminal running at 19,200 baud! Life in the fast RS-232 lane.

HF PACKET

Now, how many of you die-hard individuals out there have tried HF Packet? Did you try it when the channel was busy or when the channel was empty? Here is some food for thought...

On the VHF channels, the transmission speed is 1200 baud or roughly 120 characters of information a second. On HF, the speed is 300 baud or thirty characters per second. That is a reduction of 4 characters per second. Let's use a total Packet transmission length of 200 bytes of information. That is not just the typed data but also the other overhead associated with a packet. If we sent that over a VHF link at 1200 baud, that data will be sent out in 1 2/3 seconds and that does not account for any transmitter key up or any other delays that are associated with Packet transmission. On HF, at 300 baud, the same packet would take 6 2/3 seconds to transmit.

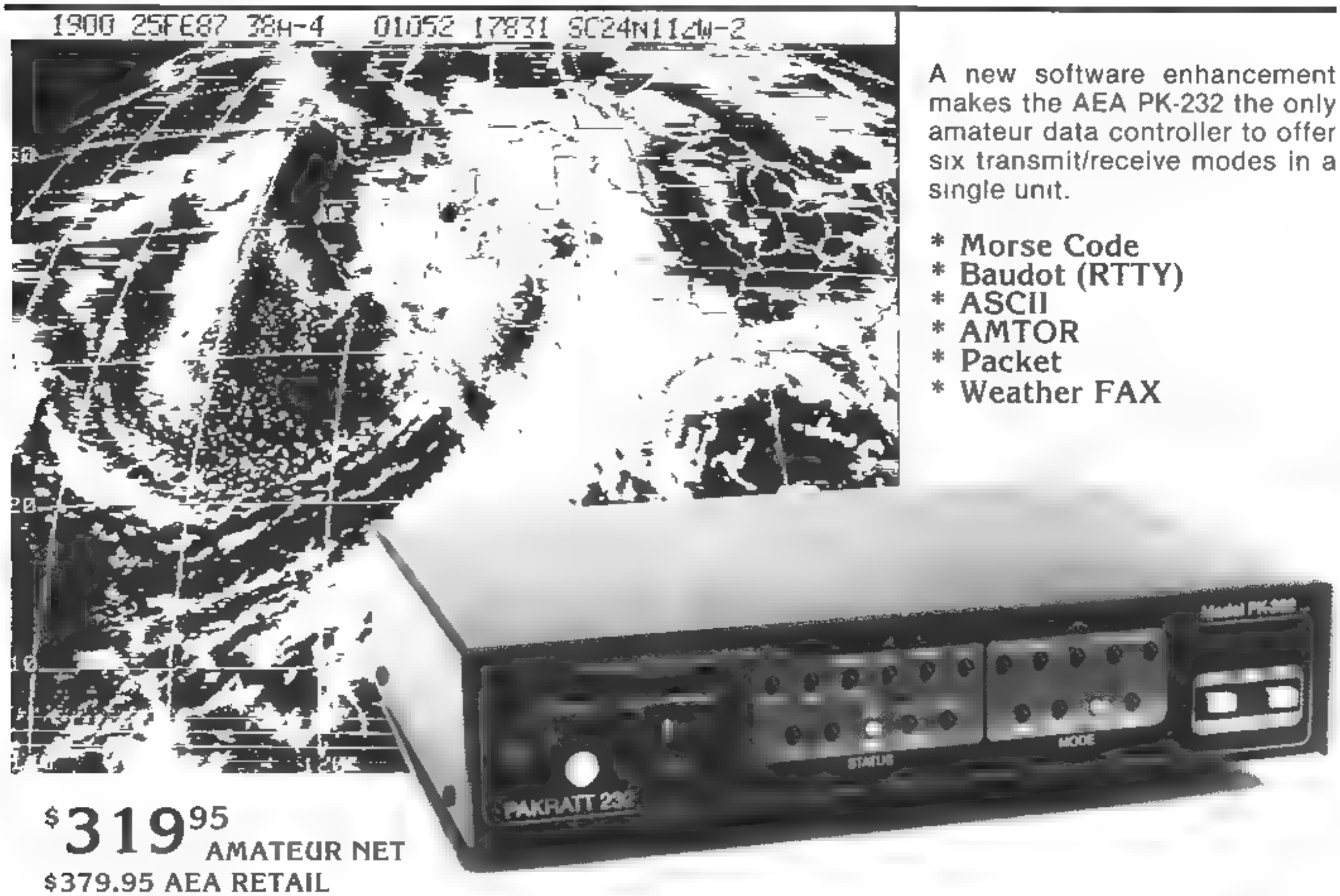
Now, who out there has not worked on HF packet? I am sure that the crowd is quite small. So, I am quite sure that the majority of you know about HF propagation characteristics and how LOUSY HF can be. Well, that noise is the biggest nemesis to HF packet there is short of cockpit error. The biggest problem is that if there is ONE bit changed in the transmission due to noise, the receiving TNC throws out that packet and requests a repeat. It would be great if there was some form of error correction code thrown in the packet so the receiving TNC would be able to recover the errors. Admittedly, that would add to the overhead of each packet but it would help on HF by cutting into the retries. VHF is not as error prone because of the quiet nature of FM and by that virtue, the data speeds can be higher and more information can be passed for a given amount of real time.

Now on the other hand, AMTOR is great on HF because of the very nature of the operation and the frequency usage. Only one user can be on a frequency with AMTOR and you can have many people on a Packet frequency. But there is no way of controlling the propagation on HF. As an example, I was talking to an East Coast station on AMTOR a couple of weeks ago on 10 meters. I could barely hear his signal thru the noise but the PK-232 did a great job of pulling the signal through. Admittedly, there were retries, but by the time that I was done typing in the +?, the units had caught up and were all ready for the changeover. I type at about 30 words a minute when things are going good for me so it had no problems with getting information to send. I can honestly say that if I was running packet on that conversation, I am quite sure there would have been a disconnect because of too many retries. Yes, I am on a soapbox! Packet should stay on the VHF and higher bands and ARQ AMTOR

(cont. pg. 14)

New PK-232 Breakthrough

Six Digital Modes - Including Weather FAX



A new software enhancement makes the AEA PK-232 the only amateur data controller to offer six transmit/receive modes in a single unit.

- * Morse Code
- * Baudot (RTTY)
- * ASCII
- * AMTOR
- * Packet
- * Weather FAX

\$319^{95} AMATEUR NET
$379.95 AEA RETAIL

Your home computer (or even a simple terminal) can be used for radio data communication in six different modes. Any RS-232 compatible computer or terminal can be connected directly to the PK-232, which interfaces with your transceiver. The only program needed is a simple terminal program, like those used with telephone modems, allowing the computer to be used as a data terminal. All signal processing, protocol, and decoding software is in ROM in the PK-232.

The PK-232 also includes a no compromise VHF/HF/CW modem with an eight pole bandpass filter, four pole discriminator, and 5 pole post detection low pass filter. Experienced HF Packeteers are reporting the PK-232 to have the best Packet modem available.

Operation of the PK-232 is a breeze, with twenty-one front panel indicators for constant status and mode indication. The 240 page manual includes a "quick start" section for easy connection and complete documentation including schematics. Two identical back panel radio ports mean either your VHF or HF radio can be selected with a front panel switch. Other back panel connections include external modem disconnect, FSK and Scope Outputs, CW keying jacks, and RS-232 terminal interface

The RS-232 connector is also used for attaching any Epson graphics compatible parallel printer for printing Weather Fax. Weather maps and satellite photos, like the one in this ad, can be printed in your shack.

Contact your local AEA dealer today for more information about the one unit that gives you six modes for one low price, the PK-232

AEA Brings you the Breakthrough

2006-196th St. SW
Lynnwood, WA 98036
(206) 775-7373

(CONNECTIONS cont. from pg. 11)

over 2400 baud when using the BIOS polling method of serial port status checking. Unfortunately, the BIOS handles all serial ports by the polling method. (reference page 466, MS-DOS Developer's Guide, Howard W. Sams, 1988).

The other method of detecting when data arrives at the computer's serial port is by means of "Interrupts". Using this method, when a character arrives at the serial port, the serial port hardware (a UART) causes a hardware signal to be generated (the interrupt) which is immediately detected by the computer. The computer then goes to a software program section called an "interrupt service routine" which moves the data into a buffer and then allows the computer to return to whatever it was doing before the interrupt occurred. Now let us say that the interrupt service routine only requires .05 millisecond (50 microseconds) to do its thing so now the computer still has nine-tenths of a millisecond left to do other jobs. And if no data is coming in, then the computer can utilize 100 percent of the available time without having to look at the port every millisecond or so.

Well, what programs use interrupts? Almost all communications programs for MODEMS and terminal emulation use interrupts. Almost any serial port application that requires high data transfer rates is a candidate for interrupt driven data handling.

What good is this information going be for you, the reader? If you are not a programmer, but worry about why you can't use the higher baud rates with success, at least the above will indicate why you are having trouble. Then look for a similar program that uses a faster serial data transfer method. If you are a programmer in BASIC, for example, this information might help you decide which data transfer method you will use, depending on the program requirements.

Be aware that the forgoing discussion barely cuts the surface of the details of IBM-PC serial ports. For those who wish to delve deeper into these mysteries, besides the SAMS book mentioned above, Peter Norton's Programmer's Guide to the IBM PC and QUE's Using Quickbasic 4.0 are good sources of information on serial port programming and problem description. I also caution the reader that my discussion may not be as accurate as I hope and invite discussion/critique as may be appropriate. As for my wish list, I would feel a lot more confident programming these beasts if some MS-DOS or BIOS Guru would make up a functional flow chart showing the complete process used by GW-BASIC to input and output a character from/to the program through a serial COM port.

WE WISH YOU ALL A HAPPY AND HEALTHY HOLIDAY SEASON AND A PROSPEROUS NEW YEAR vy 73 de Cole W6OXP

(PACKET cont. from pg. 12)

should be used on the low bands, I believe information will get through better.

DECEMBER

Christmas this year here will not be a merry one. Although I guess I can count my blessings of having a wonderful wife, a new baby, and my health. Being out of a job around this time of the year is not the greatest and living in Southern California is not the easiest when the pocket is tight. So, we will continue on here. I hope that all of you have a wonderful Christmas out there and I hope that you do not forget the meaning of it. I may not be on the comfortable side but it will not stop me from working at the local soup kitchen when I can. "Peace be unto you, for on this day, in Bethlehem, lying in a manger, a child has been born..."

ADDENDUM

Keep the cards and letters coming. Unfortunately, things are backing up here at the Owl's nest but I will keep at them. I can also be reached at the WB6YMH-2 PBBS in So. California. **de Richard, N6NKO**

(HITS & MISSES cont. from pg. 2)

Dayton each year brings together so many digital Hams giving all of us in attendance great satisfaction. If you have never been to Dayton, then you can't imagine the enormity of this event.

ANOTHER REQUEST

From time to time throughout the year I make a plea for articles. I know that many of us have a pet digital project we are working on or have perfected. Why not share it with all of us? It need not be long or contain many pictures and special drawings, just give us the lowdown on your ideas or work. The Journal has always been the place for you to present your paper and as long as it is in the digital field, I'll publish it. Or maybe you have some observations about our phase of this great hobby you would like to share.

(cont. pg. 16)

Hal Blegen, WA7EGA
12910 E. Broadway
Spokane, WA.
99216

CONTESTING

My admiration for Murphy (highly touted for his law) is boundless. The night before the last contest a stout November breeze performed a relfletorectomy on my 15 meter beam. It was 28 degrees and snowing at 2300 GMT when **NQ7M** and I clipped off on the tower at 110 feet. At that moment there were actually three of us who shared a universal lack of enthusiasm for antenna repair. There were the two of us on the tower and the neighbor. He didn't say a word when he returned the parts (which ended up in his back yard), but I think the expression on his face had previously been reserved for the man whom he suspected of being the real father of his first born son. I was honored.

As nearly as I can determine, the fellow handling the BARTG results must have been arrested for doing something despicable involving sauce pans behind the sofa. Eddie, **G0AZT** tells me that BARTG results have been available for months but at this writing they have yet to be distributed to all the participants --me, for instance.

The ANARTS scores again demonstrate the oldest complaint of contesting, "IT AIN'T WHO YOU ARE, IT'S WHERE YOU ARE THAT COUNTS." The most often heard complaint about any contest invariably pertains to a perceived location disadvantage. CQWW can only be won from South America. WAE can only be won from Europe. The zone chart is probably THE fairest system for stations competing from the same continent but it's a real challenge for a North American in competition with a VK or a VU. An interesting statistic that was missing from the results was a raw QSO number which may have indicated the extent that location played in the final score. Maybe an answer would be to award continental winners for the ANARTS but then, the only ones who are sure that the scoring is right are the winners. Congrats to **VK5RY** and **VU2JX** for their topnotch jobs!

Yet another interpretation of the WAE rules slithered out from under a rock to bite me. Above my desk at work hangs a sign which is both a command and an indictment: "ASSUME NOTHING", it says.

The WAE rules define European stations as multipliers but in the portion of the rules which apply to RTTY only, they said the continental limitations do not apply. I figured that they were only talking about the QSOs but since it didn't actually say that, Carl, **K6WZ** wrote them a letter. Carl says that the information he received from the committee indicated that the rules meant just what they said: NO CONTINENTAL RESTRICTIONS. I am still less than convinced. If they wanted multipliers to be taken from the whole ARRL country list, they should have said so but apparently most of us in the contest did not realize that all countries could be counted as multipliers. If you haven't sent in your log yet, you may want to re-score it.

A copy of the **K1EA** contest program showed up at my door, delivered in the dead of night in a plain brown wrapper (the return address had been filed off the envelope). At first glace I gave it a A+. It is fast, well thought out, easy to run and does 99% of the grunt work for you. This program, by the way, is rapidly becoming a standard for the big-time CW/SSB boys and is wholly supported by the YANKEE CLIPPER CONTEST CLUB. It runs on a clone and does four contests, CQWW, ARRL, WAE and WPX. The capacity with 640K of memory is about 4000 contacts. According to the documentation, it interfaces directly with either ICOM or KENWOOD transceivers and sends fully integrated CW from the RS232 port.

Unfortunately, easy to run is usually a tradeoff with flexibility. I could not figure any way to set it up for the RTTY contests. This alone guaranteed it a home on the dusty part of the the shelf, but beyond that, it forced me to examine a couple of the basic concepts of contesting and I don't think I like what I found.

The **K1EA** builds a data base from the all the contest log. The user of the program is encouraged by the club to send in his files to be merged into a giant data base. The file can then be checked for what is currently being dubbed, "unique calls". A unique call is a one doesn't appear in any other contest log which usually means that you screwed it up.

(cont. next pg.)

(CONTESTING cont. from pg. 15)

If a log is checked against a large enough data base all calls entered incorrectly can be found and corrected. At this point, we are down to: "MY DATA BASE CAN BEAT YOUR DATA BASE". Getting the call right the first time or taking the time for a repeat is a fundamental part of the contest. To my way of thinking, using a data base to clean up after a sloppy operator is cheating. Data base contesting may be inevitable but I don't have to like it.

The exchange often includes a signal report. I have long maintained that this is stupid. Everyone sends 599. In fact, in the contest vernacular, the folks who send a honest signal reports are sometimes called RATE BREAKERS because they are assumed to be doing so just to be difficult. The K1EA program doesn't even deal with that. It sends and logs 599 and as nearly as I could determine, there was no way to change it. If we even scratch the surface of eithical contesting, the signal report should either be a unique piece of information or it should be deleted from the exchange.

Finally, one feature of the K1EA that is probably highly valued by the metropolitan user raises another question. The K1EA software allows the computer to be fully integrated with a packet spotting network during the contest. At a keystroke it sends new multipliers worked to the net and queries the net for any new ones. The software that I received defaulted to SINGLE OPERATOR class. Although there is a movement afoot to add a SINGLE OP W/SPOTTING NET classification to the big contests, for now, a single op is supposed to do all his own logging, spotting and operating.

By incorporating an astute understanding of the contest process AS CURRENTLY PRACTICED, the K1EA program highlights some aspects of ethical competition which may be overdue for scrutiny. Draw your own conclusions.

Hope your holidays are filled which cheer and plan on the ARRL RTTY ROUNDUP in January. Good luck, see you on the band.

73'S Hal, WA7EGA

(HITS & MISSES cont. from pg. 14)

The writers who write a regular column for the Journal also need your help. If you have an idea you would like to share or a question to ask and it fits with one of the column writers, write to them direct. They want your mail. They need your input. I'm sure you will get a quick response because your input will help stimulate new information for their column each month. Sometimes it is hard to come up with something new every month and meet the deadline of publication, so by helping in this area, your input serves two purposes. It helps the writer to meet his deadline and it also brings fresh information into the monthly column. So, even if it is a simple question or lengthy paper, take the time to submit it, you will be rewarded with results.

NEW DIGIPEATER

Dean Showalter, WA6PJR wrote to me recently telling me of a new digipeater in the Los Angeles area. The machine has a BBS sponsored by WCRDXA (West Coast RTTY DX Assoc.) and is slanted to the DX community. Late breaking DX info is available, MUF/LUF beam headings and Sunrise/Set times all by prefix are also obtainable. The call is WB6EXC on 145.070 and all are welcome to use this machine. The DX information is just limited to RTTY. The BBS uses the "Pavillion" Conf. Board software. DXers will find this BBS very useful I'm sure.

MORE ON THAT FREQ. LIST

In my column last month I mentioned that the frequency list information requested by some had not materialized. I intended to try again some time after the first of the year and I will. But, until then, you might contact Fred Osterman at Universal Shortwave, 1280 Aida Dr, Reynoldsburg, Oh 43068. Fred has a nice RTTY listener letter that lists some RTTY, AMTOR and FAX frequencies. Until we can produce a decent list, my suggestion is to contact Fred.

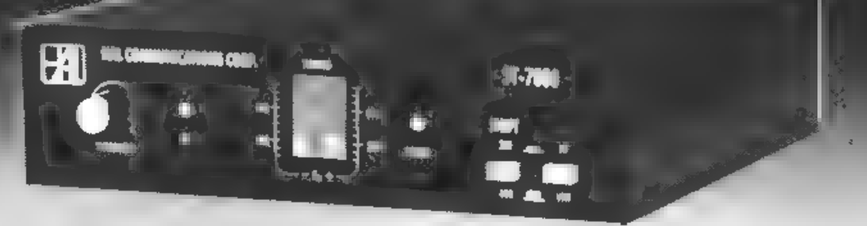
NEW COLUMN COMING

Next month I plan to start a new column which will contain articles written, by contributing writers from foreign countries. I don't know at this time whether these articles will appear in each issue throughout next year. This all depends on how many I receive during the year. In January our contributing writer will be Dima,UT5RP form the Ukraine. Dima is a popular DXer and is well know and respected in Soviet Ham circles. I think you will find his article very interesting.

Happy Holiday Season to everyone.

de Dale, W6IWO

HF PACKET DESERVES A ~~GOOD~~ GREAT MODEM



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P.O. BOX DX
Stow, Ma. 01775

DX NEWS

SEASONS GREETINGS to all, I hope all of you have a very Happy Holiday Season. Lots of new RTTY and packet gear under the tree, maybe even a new rig.

Well I am just so far behind with keeping up on the RTTY DX Scene it's unbelievable, what with the CQ/RTTY Journal Contest and my new job, I just run out of time. Many of you regulars can see that by my absence on the bands. Travels this month and next will take me to Detroit, Miami, Minneapolis and Houston in February.

The contest logs are still coming in, and I am working daily on putting them on the computer. Last year we had 300 entries and I think we will be close to that again. Next month I will flash the unchecked high claimed scores. Many nice letters in with the logs also and I thank you all for those.

DX NEWS & MAIL

Libya 5A.... Heinrich DJ6JC writes that he has recently returned from Libya and was not able to get a license this time but hopes to be able to obtain one in the future and promises RTTY! He will keep us posted.

Dominican Republic.... Radhames HI3ADI drop me a note asking for help in locating a Mailbox program in Spanish for his IBM PC. He is also looking for Contest Programs for RTTY Contests for the PC. He promises to be active in all RTTY Contests if he can get the right software. Contact him via Radhames Bonilla, Box 3, Santiago de Los Caballeros, Dominican Republic.

Taiwan.... Tim BV2B has been active on Baudot worked Nov 20 at 0330 on 14.091 by K6WZ, QSL via JA2MTO was the route given.

Western Samoa.... Yoshi 5W1GP wrote me a nice letter and really enjoyed seeing his article in the Journal. He reports that he will be in Apia until July of 1989. He has plans to operate from KH8, A35, ZK1 and ZK3 all perhaps in April. He also is looking for a 500 watt Linear, if anyone knows of one and can help get it to him it would be appreciated. Yoshi has budgeted $300 - $400 for the purchase of the linear, so if anyone can help out drop Yoshi a note and or me.

Laccadives VU7.... Had a note from the National Institute of Amateur Radio that they plan another DXpedition to the Islands sometime between Dec 15,1988 and March 31, 1989. RTTY will be one of the modes used.

T31JS.... KE6TM writes that he has been unsuccessful in getting a card from here, has tried 2 different addresses. Dan didn't mention what addresses he tried. But T31JS is Jim Smith VK9NS. Try Jim Smith, Box 90, Norfolk Island, 2899, AUSTRALIA. Jim is a good QSLer but it may take a few months.

Mellish Reef VK9... Ian VE3IEO plans to operate from here in January all modes including RTTY. If possible they also plan a stop on Willis Island. QSL this operation via NM2L.

Niger 5U.... It is reported that Baldur DJ6SI plans to return to here Dec 26th for one week. Baldur has not operated RTTY from his previous DXpedition so we will have to wait and see on this one. QSL via DJ6SI.

Nepal 9N....The Japan UNICEF Ham Club will return to Nepal from Dec 25 to Jan 6. In the past they have operated some RTTY so watch for this. QSL to JH8BKL

IRAQ YI..... Both YI1BGD and YI0BIF have been active on 15 and 20 meters usually around 1300 to 1500 UTC. Depending on who is operating determines the QSL route, evidently each operator has their own PO Box, so make sure you get the correct PO Box.

DXER of The MONTH
ZC4JA
John Atkinson

A good friend who is always active on the keys and also gets on for all the RTTY contests to give out a the ZC multiplier is John ZC4JA. I recently asked John to tell us something about himself and here is his story. **(cont. next pg.)**

(DX NEWS cont. from pg. 18)

As promised Roy here is a photo and write up on my activities here at ZC4. I have been here now about 2 and a half years, with 6 months to go before I leave this lovely Island and go back to England.

I have enjoyed the Radio side here immensely, its just a pity that most of my time was spent during the down side of the current sun spot cycle. But I am "Making Hay while the Sun Spots Shine on us" at the moment.

I have recently applied for DXCC mixed (131 countries) and furiously chasing the elusive last few for the first ever RTTY DXCC from ZC4. I have 86 to my credit and hope to add to that during the CQWW RTTY Test. Note: (he did.)

My station is a TS940S (my pride and joy), Icom 735, PK232 and the antenna is a TH3Jr by Hygain. On all modes, all rigs run barefoot. I also have various dipoles tuned with a homebrew tuner. On 2 Meters I have a Icom micro 2AT which I run into some homebrew 3 element 2 meter Quads and dipoles. Computers are an IBM AT clone with ICS software on the PK232 and DBASE III does most of my logging and record keeping. Quattro does my band planning and band checking. Wordperfect V5.0 does my scribbling and I an very much interested in obtaining more information on APLINK, can any readers of the Journal Help? I operate CW, SSB, RTTY, ARQ (my favourite) and I am freshly into Packet.

There are currently 14 ZC4's on the Island, which is split territorially into the Eastern Sovereign Base and the Western Sovereign Base. There are also 2 clubs, one at each base and both have recently been renamed to ZC4ESB - ESBA ARC (Eastern Club) and ZC4EPI - ESBA ARC (Western Club)

We do have a QSL Bureau at the WSBA and the route is: GPO, London Joint Signals Board, BFPO 53, London, England. It is a very fast bureau and only takes 1 day from London for mail to reach me. Being so small the bureau handles all cards the same day received!

I will be leaving as I said in about 5 or so months, but I hope to return again in 2 years time, well equipped and ready to continue with my USA - CA award. Hopefully I will return during a sun spot max hi hi !

That is about it. I will be bashing stateside as much as possible on RTTY as I know I am a bit rare on that mode in that direction. And of course I would like to wrap up RTTY DXCC before I leave.

73 for now and regards to all the RTTY DXers of the RTTY Journal from the "SUN ISLAND".

73, John ZC4JA

Thanks John for sharing your story with us. So those who need ZC4 look for John in the next few months and I am sure he will be active in the ARRL RTTY Contest in January.

So for now, thanks for the notes and comments and a Tip of the DX hat to, The DX Bulletin, K6WZ, 5W1GP, WA3ZKZ, W5HEZ and ZC4JA.

Also what with my new schedule and the contest work and the other things I have to do, I have told Dale I would like to step down as the DX Editor for the Journal. So Dale and myself are both looking for a new Editor for this column. I will stay on until we find someone and of course will continue to contribute to the Journal. 73 Roy,KT1N

JOHN, ZC4JA
(see DX NEWS)

ED: Roy must give up his column due to job, family and other commitments. He will be missed by all of us and he has done an outstanding job. But, we must try to find some one to fill his shoes. If you are intersted in writing this column, please contact either Roy or me.

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HELP WANTED - I want to hookup FSK to my Kenwood T/R 599D series radios. I have a PK-232 also. Any information will be helpful. Also looking for info on FSK operation on OSCAR 13. All letters answered. Rick Keefer, WB7EJD, 2809 Amulet St, San Diego, Ca. 92123

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